

# Approaches and MALL Integrated with the Teaching of English at the Selected Asian Universities

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## Abstrak

Tujuan utama dari penelitian tinjauan komprehensif ini adalah untuk mensintesis temuan penelitian tentang pemanfaatan Mobile-Assisted Language Learning (MALL) dalam pendekatan pedagogis, metode pengumpulan data, dan fokus penelitian. Penelitian ini memberikan gambaran luas tentang aplikasi MALL dalam pembelajaran dan pengajaran bahasa, menyoroti efektivitasnya dan area yang perlu ditingkatkan. Dalam hal metodologi, penelitian ini mengadopsi pendekatan tinjauan literatur sistematis untuk menganalisis berbagai studi tentang MALL. Artikel-artikel tersebut dikategorikan berdasarkan pendekatan pedagogis mereka (pembelajaran berbasis tugas, pengajaran bahasa komunikatif, perilaku), metode pengumpulan data (kuesioner, tes, wawancara, diskusi kelompok forum, observasi), dan fokus penelitian yang terkait. Studi yang dipilih menggunakan berbagai pendekatan pedagogis termasuk pembelajaran berbasis tugas dengan sembilan peserta menjadi jumlah yang paling signifikan. Data dikumpulkan melalui berbagai cara seperti kuesioner dengan 39 artikel. Beberapa permasalahan penelitian ini juga diidentifikasi yang berkisar seputar masalah literasi teknis dan digital. Hasilnya menunjukkan bahwa MALL efektif dalam meningkatkan pemerolehan bahasa ketika diimplementasikan dengan benar dalam kerangka pedagogis yang sesuai. Namun demikian juga mengungkapkan tantangan seperti perlakuan tidak sama antara kelompok kontrol dan eksperimental di beberapa studi serta kesulitan teknis yang dihadapi oleh peserta didik. Makalah ini menyimpulkan bahwa meskipun MALL menawarkan peluang menjanjikan untuk meningkatkan pembelajaran bahasa; para pendidik perlu mempertimbangkan tantangan-tantangan tersebut saat merancang strategi instruksional mereka. Penelitian selanjutnya dapat fokus pada mengukur dimensi otonomi peserta didik secara empiris dalam konteks MALL atau menjajaki cara-cara untuk mengatasi tantangan-tantangan yang telah teridentifikasi untuk implementasi teknologi mobile lebih efektif di kelas-kelas bahasa.

**Kata Kunci:** *Pembelajaran Bahasa dengan Bantuan Seluler, Pengajaran Bahasa Inggris, ASIAN Universitas*

## Abstract

This comprehensive review paper primarily aims to synthesize research findings on the utilization of Mobile-Assisted Language Learning (MALL) in pedagogical approaches, data collection methods, and research concerns. The study contributes a broad overview of the application of MALL in language learning and teaching, highlighting its effectiveness and areas for improvement. In terms of methodology, the paper adopts a systematic literature review approach to analyze various studies on MALL. The articles were categorized based on their pedagogical approaches (task-based learning, communicative language teaching, behavioral), data collection methods (questionnaires, tests, interviews, forum group discussions, observations), and their associated research concerns. The selected studies employed different pedagogical approaches including task-based learning with nine participants being the most significant number. Data was

collected through various means such as questionnaires with 39 instances being the highest. Several research concerns were also identified that revolved around technical and digital literacy issues. The results suggest that MALL is effective in enhancing language acquisition when implemented correctly within suitable pedagogical frameworks. However, it also revealed challenges such as unequal treatment between control and experimental groups in some studies and technical difficulties faced by learners. This paper concludes that while MALL offers promising opportunities for language learning enhancement; educators need to consider these challenges when designing their instructional strategies. Future research could focus on empirically measuring learner autonomy dimensions within MALL context or explore ways to overcome identified challenges for more effective implementation of mobile technology in language classrooms.

**Keyword:** *Mobile-Assisted Language Learning, Teaching English, ASIAN Universities*

## INTRODUCTION

As of now, mobile technology is a significant component of our daily life. As a result, teachers and researchers frequently use them in English as a Second Language (ESL) and English as a Foreign Language (EFL) acquisition procedures in order to expand language classroom acquisition to the actual world (T. C. Hsu, 2017; Tai, 2012; Wong, 2013). Learning English has been the subject of extensive scholarly and educational investigation. Language education is divided into four major stages. These stages are succinctly summarized as communicative competency, linguistic proficiency, cross-cultural experiences, and multiple literacies (Byram et al., 2013; Davarpanah et al., 2019; Granger, 2017). Therefore, communicative competency is the fierce fight for communication in interpersonal relationships among individuals with varied viewpoints and accents. It is sometimes referred to as second language fluency. Their linguistic proficiency measures a person's capacity to do or communicate a skill (Peets et al., 2022; Presbitero, 2020). Cross-cultural experiences are when people use culture to help them learn a new language. It has made the classification of information, skills, and methods of process creation more objective and measurable (Mogias et al., 2019; Vega et al., 2023). Multiple literacies articulate how different languages are understood by those performing culture or communication activities (Brownell, 2020). The languages area, particularly English, is as important as any other production process when limiting the scope of the study. Due to its usefulness as a method of communication, English is regarded as a foreign communication.

In the field of English Language Teaching, the phrase "mobile-assisted language learning" (MALL) is frequently used (ELT). MALL ELT research is extensive, including ESL and EFL (Bozdoğan, 2015). One of the most important aspects of learning the English language is expanding one's vocabulary to be applied to various tasks such as listening, reading, speaking, and writing, among others (Misbah et al., 2017; Rajprasit et al., 2015). Furthermore, another mobile software technology is being developed specifically for language learning objectives, incorporating and mixing concepts from educators or education professionals. This educational technology is constantly being improved and upgraded to bring new features that make it even more appealing. MALL provides students with the opportunity to play an active role in socialization while also practicing their language skills (Chester S. J. Huang, Stephen J. H. Yang & Tosti H. C. Chiang, 2016).

Several review studies on mobile-assisted language learning (MALL) were carried out. Zain & Bowles (2021) evaluated the evolution of MALL during the last nine years in their exhaustive analysis of current studies. He referred to a variety of theoretical and conceptual frameworks, including the Zone of Proximal Development (ZPD), the Technology Acceptance Model (TAM), and The Community of Inquiry (CoI). Mohammadi & Shirkamar (2018) review all of these issues have been examined to understand better how to implement MALL in developing countries and how MALL is defined and how it is viewed by students who use it and how it compares to MALL in developed countries. Aside from that, it also aims to shed light on the cultural differences that may influence how MALL is used and implemented across cultures, and it acknowledges that there may be other elements to investigate that influence how new technologies are implemented in other cultures.

Furthermore, Rafiq et al. (2021) describe the current state of mobile learning related to ESP. Exclusion and inclusion criteria were used to choose 28 papers among 139 published during 2012-2021. Mobile apps were shown to be the most popular learning method. Second, with ESP mobile learning, vocabulary and linguistic skills are emphasized more. Third, mobile learning in ESP dominated the business field of study significantly. As a result, this study goes beyond previous reviews in that it examines MALL in circumstances that are recognizable to participants. This study looked at the educational methodologies utilized in the evaluated studies, data collecting, familiar language acquisition environments, affordances, and current research challenges. This review study aims to address several key research issues. Firstly, it seeks to identify the pedagogical approaches employed in the reviewed papers. The analysis reveals a variety of methods including task-based learning, communicative language teaching, and behavioral approaches. Each approach provides unique insights into the diverse strategies for incorporating Mobile-Assisted Language Learning (MALL) into language education. Secondly, the study examines the data collection procedures used in these research works. A range of methods including questionnaires, tests, interviews, forum group discussions, and observations were identified. These varied techniques highlight the multifaceted nature of research in this field and underscore the importance of selecting appropriate data collection tools to accurately capture and interpret findings. Lastly, this review investigates the research concerns raised in these studies. This includes technical and digital literacy issues faced by learners when using MALL as well as methodological concerns such as unequal treatment between control and experimental groups in some studies. By identifying these concerns, this review contributes to a deeper understanding of potential challenges within MALL implementation and offers direction for future investigations.

Additionally, although previous reviews have acknowledged various research concerns related to MALL, including technical difficulties and methodological issues, few have deeply explored how these challenges could influence future implementation and progress within this field. The novelty of this study resides in its comprehensive approach. Unlike previous works that focused primarily on individual aspects or specific contexts of MALL, this review presents an overarching examination across multiple pedagogical approaches, data collection procedures, and research concerns. This broad perspective allows for a more integrated understanding of the current state-of-the-art in MALL research and offers valuable insights for future investigations.

## RESEARCH METHODS

To assure trustworthiness, both an electronic and a manual search of papers were conducted. Prisma, which stands for Preferred Reporting Items for Systematic Reviews and Meta-Analyses, was used to guide this study's search for information on the web. Moher et al. (2015) proposed that PRISMA is an evidence-based set of items designed to help authors prepare and report various systematic reviews and meta-analyses. As seen in Figure 1, this systematic review follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method, which consists of four processes: identification, screening, eligibility, and inclusion. Researchers have frequently employed it because of its comprehensiveness and flexibility in other investigations.

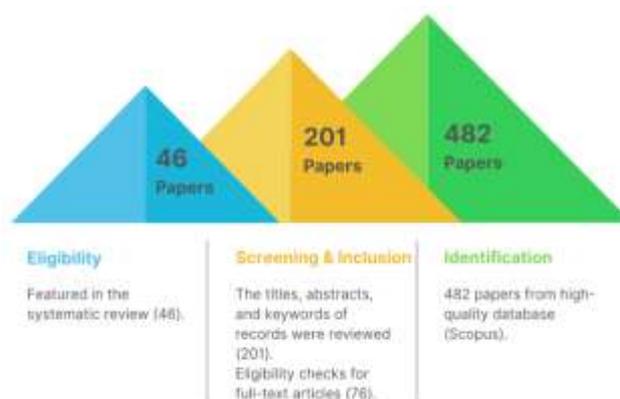


Figure 1. Pyramid of PRISMA

As described in the PRISMA guidelines, the systematic review begins with a review of the process of identification. The best papers from 2013 to 2022 were chosen to show how important factors and useful tools can be compared. These articles were chosen based on Asian universities' higher education ideals. This section establishes our first criterion for selecting papers based on the mobile-assisted language learning (MALL) technique for learning foreign languages, which is particularly useful for ESL and EFL learners. Once all articles have been identified, the screening process begins, with the first step being to exclude items that appear in several databases. 201 articles were left after the initial filtering stage, after which 15 duplicates were deleted. The titles, abstracts, and keywords of these 201 papers were scrutinized to ensure they were relevant to mobile-assisted language learning, ESL, EFL, and Asian universities. 76 papers not relevant to this study's purpose were assessed for inclusion and exclusion criteria throughout this screening process. 46 articles could be included in this review using the inclusion and exclusion criteria. A total of 46 publications were left, and criteria were used to select more relevant papers that might better show the notion of MALL use in Asian universities.

After a cursory assessment of the papers, it became clear that categorization would be beneficial, as they cover a wide range of topics related to mobile use in language learning and employ a diversity of methodological techniques. As a result, the articles were coded to extract data from the selected research using a categorization form. The researchers came up with a draft of this form depending on the study's scope. The draft form was reviewed first by two specialists with experience in MALL or conducting literature reviews and then by a language expert. During the data analysis, it was also altered. Mendeley, a reference program, was used to store all the articles. Quantitative research methods such as content analysis, also known as text analysis, are employed in this study to describe the patterns found in MALL studies. Tables categorize papers, and descriptive statistical approaches display the findings. The rising dangers of MALL, such as teacher preparation, cheating, and learning interruption, were examined in detail in a literature review (Metruk, 2020). Furthermore, this review incorporates material offered in non-empirical studies that are relevant to support the educational claim of the previous investigations and acts as a support to create the pedagogical implication.

## RESEARCH FINDING AND DISCUSSION

The results have been presented and divided into four major categories: (1) pedagogical approaches, (2) data collecting, and (3) research concerns. An example accompanied each discovery to help the reader better understand the findings.

### Pedagogical Approaches

The findings showed that the studies examined used a variety of pedagogical approaches. The approach with the most significant number of participants ( $n = 9$ ) was task-based learning. It is a student-centered approach to language acquisition that places a premium on the usage of the target language to accomplish meaningful tasks. Typically, the teacher sets a task for students to perform, communicating in the target language. Based on students in Krasulia & Saks (2020) and Simonova (2016), who designed a contextualized MALL utilizing a task-based approach.

**Table 1. Search results for literature**

<i>Approaches</i>	<i>Journal (alphabetically)</i>	<i>Author (s) (Year)</i>
Task-based learning	Advanced Learning Technologies	Krasulia and Saks (2020)
	Computer-Assisted Language Learning	Botero, Questier, and Zhu (2019)
	Computers in Human Behavior	Yu, Chou, Yang, and Hu (2022)
	Computing in Higher Education	
	Education Tech Research Dev	Tarighat and Khodabakhsh (2016)
	Information Systems and Technologies	
	Interactive Collaborative Learning	Mohsen and Mahdi (2021)
	LEARN: Language Education and Acquisition Research Network	Sun and Gao (2020)
		Luis (2016) Simonova (2016) Mauricio and Genuino (2020)

Communicative language teaching	Educational Computing Research	Yu (2020)
	International Journal of Society, Culture, and Language (IJSL) Sustainability by MDPI	Mortazavi, Nasution, Kassaie, Shairi, Gashmardi (2021)
Behavioral	Information and Education Technology	Abdolahzadeh, Behroozi, and Davarpanah (2021)
	International Journal of Interactive Mobile Technologies PalArch's Journal of Archaeology of Egypt/Egyptology	Wang and Hsu (2020) Dolzhich, Dmitrichenkova, Ibrahim (2022) Ali, Mahmood, and Yasmeen (2019)

There were three participants in the study who received communicative language teaching. Mortazavi (2021) said that more communicative methods should be used when teaching and learning a foreign language. He said that with more integrative methods, the language should be seen as a whole, or mobile technology should not only be used for one language skill. As a result, students in Kassaie et al. (2021) and Yu (2020) were able to engage in communicative language activities that were based on The technology acceptance model (TAM). According to these findings, messaging apps like WhatsApp, Line, and WeChat can help people improve their productive and responsive skills.

In three research, a behavioral approach was used. Learning activities in Ali et al. (2020) were made with a behavioral approach in mind. Students learning English at the postgraduate level in Pakistan have a favorable attitude about MALL. The students said that MALL should be a regular part of ESL and ELT classrooms due to its numerous benefits and advantages. Among the things that Wang & Hsu (2020) look at when it comes to mobile English, learning is perceived self-efficacy and how easy it is for students to use, how useful it is, how satisfied they are with it, how compatible it is, and how it affects their learning. Other studies (Dolzhich et al., 2021) have looked into how Saudi EFL teachers feel about using mobile-assisted language learning to help students learn English. In addition, the findings revealed that the statements that Mobile phones can be utilized to teach/learn diverse language skills and Mobile phone usage might establish collaborative learning environments are also correct.

### Data Collecting

The findings indicated that researchers gathered data through the use of a questionnaire (n = 39), a test (n = 14), interviews (n = 18), a forum group discussion (1), and observation (2). Using the UTAUT acceptance model, researchers gathered data on students' views of MALL and the factors influencing their behavior and their actual use of MALL (García Botero et al., 2018). Additionally, Hoi (2020) seeks to elucidate the critical aspects and relationships that influence Vietnamese higher education students' attitudes toward and desire to use MALL. Other researchers, such as (Almadhady et al., 2020; Kaur et al., 2021; Thedpitak & Somphong, 2021), and others, have made similar findings.

The researchers sought to demonstrate the effectiveness of their intervention by analyzing data from a pretest and posttest (Shih, 2017). In order to do this, students in the control and treatment groups had their prior knowledge and learning achievement assessed and compared (C. F. Hsu, 2017). It was shown that students believe that peer tutoring helps them improve their language skills in the classroom, as evidenced by the interviews conducted with them. It also aids vocabulary acquisition and is more successful than a classroom atmosphere in fixing language difficulties. According to student feedback, mobile settings can alleviate language difficulties, alter attitudes toward language and improve students' awareness in a favorable way (Tanrikulu, 2021). Furthermore, from the Forum Group Discussion, which directly expresses the learners' attitude, a language attitude framework was picked from the transcript in the classroom (Mauricio & Genuino, 2020). Finally, two researchers (C. F. Hsu, 2017; Jie et al., 2020) have observed that the students in the mobile learning group outperformed those in the language lab group in terms of learning performance.

## Research Concerns

Many problems were found in the articles that were looked at. Some technical and digital literacy issues came to light during the education. Despite significant limitations, university English majors said they are ready for mobile-assisted learning. People working in mobile pedagogy to teach English as a second language might find the materials for this study useful (Krasulia & Saks, 2020).

One study found that students in the control group were taught in a typical classroom setting, whereas their counterparts in the experimental group used mobile technology. It was not considered an equal treatment for both groups ( $n=4$ ). Mortazavi (2021) found that utilizing mobile devices to acquire vocabulary or mixed language skills was more effective than training discrete abilities like listening in confined spaces (such as a classroom). The second area of focus was Mobile-Assisted Language Assessment (MALA), which was developed by (Tarighat & Khodabakhsh, 2016) to bring together the two disciplines of Mobile-Assisted Language Learning (MALL) and Portfolio Assessment, which is itself a subset of Dynamic Assessment. Learning and evaluation are linked since the goal is to help students reach their full potential by expanding their Zone of Proximal Development (ZPD). Other studies, such as Sato et al. (2020), look into student autonomy in four different ways: psychologically, technically, culturally, and politically. However, no study has been discovered to quantify these dimensions of learner autonomy empirically.

## Discussion

The findings are divided into three categories, and the following topics were covered the most frequently in the publications reviewed. Researchers can utilize task-based learning, teaching students to communicate in a foreign language, and other pedagogical approaches. The second step is to collect data. The questionnaire, interview, test, forum group discussion, and observation were utilized to gather data. Lastly, researchers have developed some issues from publications to be reviewed based on the most recent research questions. Most studies used task-based learning or communicative language teaching approaches because the learning occurred outside, and students were expected to produce language output while completing assigned tasks. Researchers in numerous studies did not disclose which instructional approaches were used to create the MALL activities. Because of this, it should be made clear in study papers. According to previous review studies, these results are consistent with those found here. Students are unwilling to participate in mobile-assisted learning assignments unless they are supervised or assessed like course work, as suggested by Bozdoğan (2015). As a result, if MALL activities are included in the curriculum, they should either be graded as part of the course requirements or be engaging and easy for students to complete.

The majority of studies used a pretest-posttest design to determine the intervention's effectiveness on learning outcomes; this sort of research design allowed for the gathering of actual evidence. Researchers employed a questionnaire to confirm that their participants viewed the technology favorably and embraced it as a tool for learning. Students could not be observed directly in all situations. Thus, interviews were an important source of information. Additionally, interviews enabled students to share specific personal details (Shih, 2017; Vega, 2019). This study distinguishes itself from other review studies by focusing on MALL in familiar settings. Research publications on MALL published in the last decade were examined in this study. This research was conducted to better understand how mobile technology and applications are being used to teach and learn languages at Asian universities. The writers address this study's pedagogical methodologies, data gathering, and current research concerns.

Following are some recommendations for the teaching and research communities in the field based on these findings. First, several studies did not identify the pedagogical methodologies used for MALL design. Hence it is proposed that such vital information be openly stated. Second, the researchers in this study discovered that most studies used surveys and experimental research methodologies, implying that many sorts of data might be acquired. For instance, physiological data (e.g., physical activity, attention, and relaxation) can be acquired through wearable sensor technology, and the correlations between data and MALL can be examined to advance the discipline. Third, several research problems were discovered at MALL, including technical and

digital literacy issues. Despite substantial constraints, university students majoring in English stated that they are prepared for mobile-assisted learning.

## CONCLUSION

There are four main stages in learning a new language. Communicative competency, linguistic proficiency, cross-cultural experiences, and multiple literacies are the steps involved. Expanding one's vocabulary is one of the most significant components of learning English and being fluent in it. MALL allows pupils to participate actively in the socialization process. Up to this point, several review studies on mobile-assisted language learning (MALL) have been conducted. In order to find relevant information on the internet, researchers used Prisma, an acronym for Preferred Reporting Items for Systematic Reviews and Meta-Analyses. An automated and manual search of documents was performed to ensure reliability. In order to highlight how significant aspects and valuable tools may be compared, the best publications from 2013 to 2022 were selected. 76 papers were not related to the goal of this research. A classification form was utilized to obtain the data from the selected research. In-depth research was done on the growing threats of MALL, such as teacher preparation, cheating, and learning interruption. Participation in a task-based learning environment was most common. Student-centered methods of teaching languages emphasize the importance of using the target language in real-world contexts. For mobile English learning, Wang & Hsu examine perceived self-efficacy, ease of use, utility, satisfaction, compatibility, and the impact on students' ability to learn, among other things. Other researchers have investigated how Saudi EFL teachers perceive the use of mobile-assisted language learning to help students learn English. It has been found that mobile environments can help students overcome their language barriers, change their attitudes toward language, and raise their level of awareness. Another thing that two researchers have found is that students in the mobile learning group did better than those in the language lab group when it comes to learning. The majority of English majors in colleges and universities said they are ready for mobile learning despite the obvious drawbacks. In the subject of mobile pedagogy, materials developed for teaching English as a second language may be valuable for those involved.

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